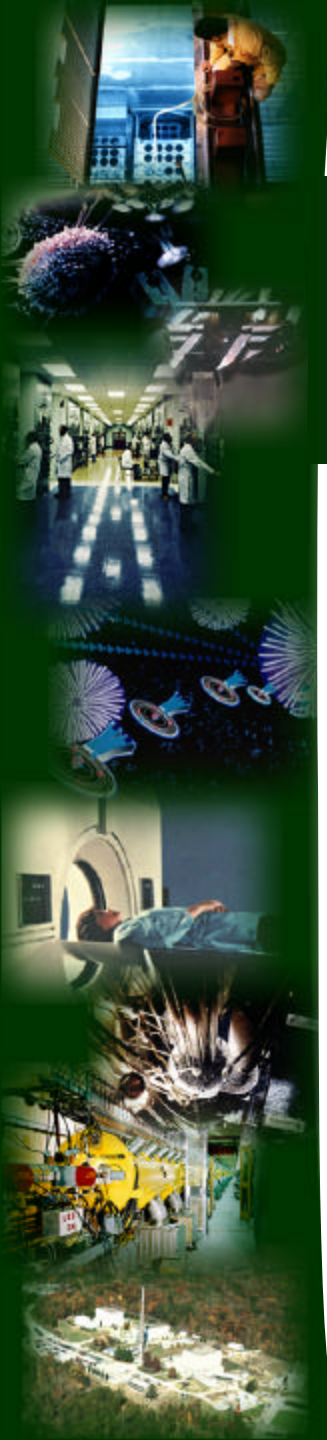


DOE Isotope Supply 2002-2010

DOE/NCI Joint Workshop

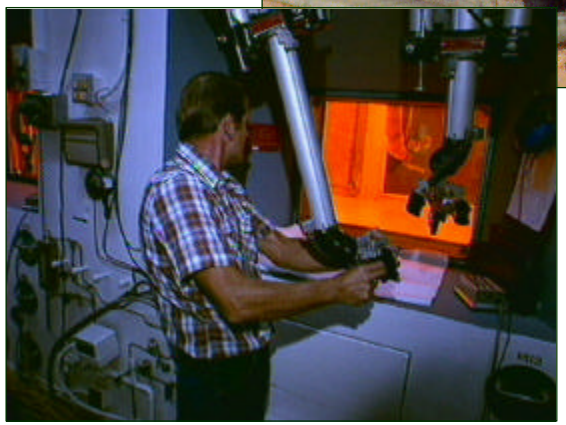
Owen Lowe
Office of Isotopes for Medicine and Science
Office of Nuclear Energy,
Science and Technology

June 17, 2002

DOE Isotope Supply 2002-2010
Near term: 2002 and 2003

2002- Continue as we have been

- **5 facilities are available for isotope production**
  - Accelerators at Brookhaven and Los Alamos
  - Reactors at Oak Ridge, Idaho, Sandia
- **"Dependent" operations continues**
- **Final funding of current ANMI grants**



DOE Isotope Supply 2002-2010
Near term: 2002 and 2003

2003- Some significant changes

- Facilities as in 2002
- BLIP a question- Will the AGS and RHIC continue to need protons?
- Big change: advance payments for all isotopes
- Research isotopes will be selected through NEPRI
- Commercial isotopes: advance payment before irradiation or processing can begin
- No funding requested for ANMI grants

DOE Isotope Supply 2002-2010
Intermediate term: 2004-2008

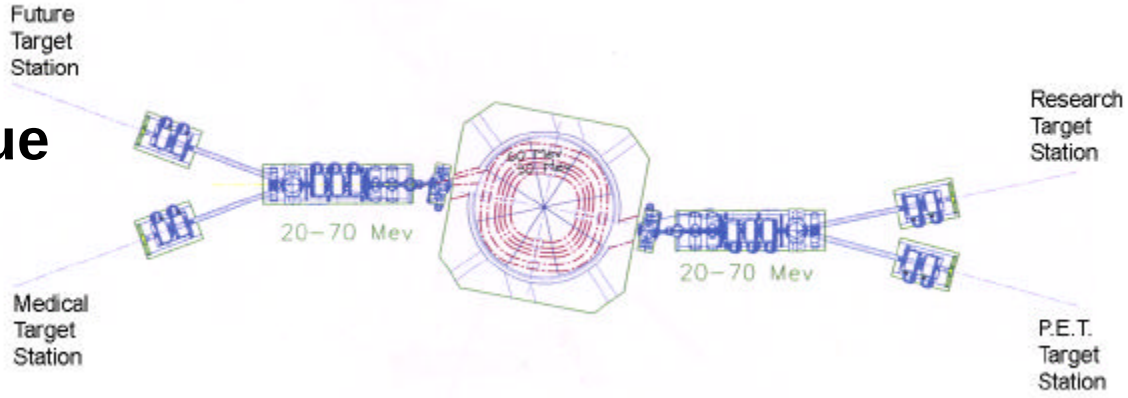
2004

- **Isotope Production Facility at Los Alamos comes on line**
  - Return to two active accelerators
  - More variety in isotopes produced
  - More schedule flexibility
- **NEPRI continues**
- **Advance payments may be waived if working capital can be obtained**
- **Will seek funding for new ANMI grants**

DOE Isotope Supply 2002-2010
Intermediate term: 2004-2008

2008

- **New production cyclotron comes on line**
  - If funds are appropriated in 2003 and 2004
  - Brookhaven has invested heavily in conceptual development- have inside track
  - Cyclotron will be operated by a subcontractor- primary mission will be to operate safely, predictably, and reliably
- **NEPRI and ANMI (if funded) will continue**



DOE Isotope Supply 2002-2010
Long term: 2010 and beyond

Work to implement NERAC long-term recommendations:

- Promote the greatest synergism among national labs, academia, and industry to fulfill the Isotope Program's mission.
- Acquire a dedicated, single-mission, isotope production and processing facility that would be fully operational by 2010. The facility should include a cyclotron and a reactor both dedicated to isotope production based on off-the-shelf designs.
- Maintain a stable/enriched isotope inventory for research purposes.
- Ensure an adequately sized and properly trained work force to meet national isotope needs.
- Implement a contingency plan to guarantee an uninterruptedradioisotope and stable isotope supply for the country's research needs.